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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/797,128 | 03/11/2004 | Akihito Ogawa | 250363US2S | 4657 |
| 22850 | 7590 | 07/13/2007 | EXAMINER | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | ALUNKAL, THOMAS D | |
| | | ART UNIT | PAPER NUMBER | |
| | | 2627 | | |
| | | NOTIFICATION DATE | DELIVERY MODE | |
| | | 07/13/2007 | ELECTRONIC | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/797,128 | OGAWA ET AL. | |
| | Examiner | Art Unit | |
| | Thomas D. Alunkal | 2627 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 April 2007.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 3-7 and 11-18 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 3,6,11 and 14-17 is/are rejected.
 7) Claim(s) 4,5,7,12,13 and 18 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 11 March 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____

Response to Arguments

Applicant's arguments filed 4/23/07 have been fully considered but they are not persuasive.

Regarding applicant's arguments in Paragraph 1 of Page 8, the Examiner points to the Abstract of Aoki. Namely, when the C/N of the address information is good, the reproduction of address information (obtained from the wobble signal) is also improved. Thus, by monitoring the C/N ratio, the apparatus also evaluates the quality of the wobbled track.

Regarding applicant's arguments in Paragraphs 2 and 3 of Page 8, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the wobbled track is squared ***without delay***") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the Examiner asserts that Aoki does disclose the limitations of claims 3 and 11.

Regarding applicant's arguments pertaining to claim 6 on Page 9, as stated above, the Examiner asserts that Aoki discloses the limitations of claims 3 and 11. Thus, the rejection of claim 6 is maintained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3, 11, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoki (US 5,999,504).

Regarding claim 3, Aoki discloses an information storage medium evaluation apparatus for evaluating an information storage medium, which comprises a wobbled track that is used to guide a light beam and is wobbled in correspondence with a frequency (Figure 11), a phase of which is modulated at predetermined timings to reflect predetermined information (Column 7, lines 15-18), comprising a detection unit configured to detect reflected light of a light beam with which the wobbled track formed on the information storage medium is irradiated (Figure 2, Element 15), a filter unit configured to suppress noise from a reproduction signal corresponding to the wobbled track on the basis of the reflected light detected by the detection unit (Figure 9, Element 5), a squaring unit configured to square the reproduction signal from which the noise is suppressed by the filter unit (Figure 9, Element 43), an evaluation unit configured to evaluate quality of the wobbled track on the basis of frequency characteristics of the squared reproduction signal squared by the squaring unit (Column 4, lines 53-61). Specifically, a quality C/N ratio is determined and maintained based on the double

multiplied wobble signal. These evaluation means are inherently provided within optical disc drive 13 of Figure 2).

Regarding claim 11, method claim 11 is drawn to the method of using the corresponding apparatus claimed in claim 3. Therefore method claim 11 corresponds to apparatus claim 3 and is rejected for the same reasons of anticipation as used above.

Regarding claims 14 and 16, Aoki discloses wherein the suppressing process includes a frequency band six times or more a carrier frequency of the reproduction signal (Figure 9, Element 5, band pass filter, and Column 111, lines 1-8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki (US 5,999,504) and in view of Horie et al (hereafter Horie)(US 5,862,123).

Regarding claim 15 and 17, Aoki does not disclose a numerical standard for which the C/N ratio is to be maintained. Rather, in Column 4, lines 56-58, Aoki discloses that the C/N ratio of the reproduced double multiplied wobble signal is simply high. In the same field of endeavor, Horie discloses that the difference between peak

and noise levels obtained from the frequency characteristics of the reproduction signal is a minimum of 25 dB (Column 10, lines 13-15).

One of ordinary skill in the art at the time of the applicant's invention would have been motivated to provide the preferred lower C/N ratio limit of Horie to the disc evaluation method of Aoki, motivation being to assure proper address readout from the optical disc (Column 24, lines 4-8 of Horie).

Regarding claim 6, see the combination of Aoki and Horie's teachings of claims 11 and 15 above. Claim 6 contains similar limitations to claims 11 and 15 and is rejected over the same grounds.

Allowable Subject Matter

Claims 4, 5, 7, 12, 13, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4, 5, and 7 contain allowable subject matter for the reasons as set forth in the Non-Final Office Action dated 1/22/07. Claim 12 corresponds to claim 4 and claims 13 and 18 correspond to claim 5. Thus, claims 12, 13, and 18 contain allowable subject matter for the same reasons as set forth in the Non-Final Office Action dated 1/22/07.

Conclusions

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The art made of record and not relied upon is considered pertinent to the applicant's disclosure: Senshu (US PgPub 2003/0103429) discloses a disc recording medium that limits the C/N ratio based on wobble to various thresholds. Suzuki (US PgPub 2002/0051416) discloses an optical recording method used to maintain a preferred C/N range of near 30 dB. Endoh et al (US 6,487,164) discloses numerous tables regarding typical error to C/N ratio relationships. Kuribayashi et al (2002/0131352) disclose a signal processing apparatus used to control crosstalk.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas D. Alunkal whose telephone number is (571)270-1127. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571)272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thomas Alunkal/
Examiner AU 2627

WAYNE YOUNG
SUPERVISORY PATENT EXAMINER